**Geometry Lesson**

**Making a Kite and Documenting the Experience through a Podcast**

**21st Century Learning**

South Philadelphia HS

**Objective:**

Today we will demonstrate understanding of the properties of kites. The properties we will focus on include:

1-non-consecutive sides of a kite are congruent

2-the diagonals bisect each other to form 90 degree angles

3-the properties of isosceles triangles – two base angles are equal, two legs of triangle are equal

You will know you have learned this when you can build a kite that flies and be able to explain and understand the properties of a kite in a Podcast.

**Content Standard(s) Addressed:**

2.9.11.J: Analyze figures in terms of the kinds of symmetries they have.

2.3.9.A: Select and use appropriate units and tools to measure the degree of accuracy required in particular measurement situations.

2.3.9.C: Demonstrate the ability to produce measures with specified levels of precision.

**21st Century Skills Addressed:**

Communication, Interpersonal & Collaborative Skills

Critical Thinking & Systems Thinking

Problem Identification, Formulation & Solution

Creativity & Intellectual Curiosity

Self-Direction, Accountability & Adaptability

**Project Goals:**

**Student Directions – Part I – Creating the Kite**

* Take (2) pieces of dowel, sizes 6 cm & 12 cm
* Measure 2/3 distance down on large dowel & ½ distance down on the small dowel.
* Place the small dowel on top of the large dowel
* Tie a piece of string 2/3 distance & ½ distance to form 90 degree angles that are perpendicular – they must form a cross
* Using scissors put a notch on each corner piece of the dowel, tie a string from the top connecting to all four corners
* When you are finished
  + the triangle on the top should have non-consecutive sides that are congruent
  + the inverted triangle on the bottom should have non-consecutive sides that are congruent
* Take a piece of plastic; cover the kite and the string
* Tie a piece of rope to the bottom to fly the kite

**Student Directions – Part II – Creating the Podcast**

Use Garage Band to describe in words, pictures and songs the procedure that you used to create a kite. The podcast must include at least 5 pictures and be from two to five minutes in length.

The following link contains tutorials that can be used as a resource for creating Podcasts in Garage Band:

<http://www.apple.com/ilife/tutorials/#garageband>

**Assessment:**

See Kite Podcasting rubric for specific assessment/grading information.